

**AMENDMENTS TO THE DRAWINGS**

The attached sheet 3 of drawings includes new Figure 2B. Previous sheet 3, containing Figures 3 and 3A, has been renumbered as sheet 4. No new matter is believed to be introduced as a result of the aforementioned amendments to the drawings.

Attachment: Replacement Sheets 3 and 4  
Annotated Sheet Showing Changes (Figure 2B of sheet 3 is new)



## **REMARKS**

This paper is presented in response to the Office Action. Claim 8 is canceled, and claims 6, 7 and 18 are amended. Claims 14-17 and 28-37 have been withdrawn by the Examiner. Claims 1-7, 9-13 and 18-27 are now pending in view of the aforementioned cancellations and withdrawals.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the convenience and reference of the Examiner, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

### **I. General Considerations**

Applicant notes that the remarks and amendments presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited references. Such remarks, or a lack of remarks, and amendments are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicant reserves the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicant, of additional or alternative distinctions between the claims of the present application and the references cited by the Examiner, and/or the merits of additional or alternative arguments.

### **II. Objection to the Drawings**

The Examiner has objected to the drawings as purportedly failing to show every feature of the invention specified in the claims. Applicant submits that for at least the reasons outlined below, the objection should be withdrawn.

Following is a list of the features (in bold) which the Examiner has asserted are missing from the drawings, along with Applicant's comments concerning the particular listed item:

#### **1. plurality of conductors of a cable**

In light of the addition of Figure 2B herein, showing conductors 205A and 205B, Applicant submits that the objection as to this feature should be withdrawn.



2. ***attachment between the fitting and the terminal***

Applicant disagrees with the Examiner and notes that Figure 2A, for example, clearly shows a terminal 302 attached to an interface portion 312 of fitting 308. Applicant accordingly submits that the objection as to this feature should be withdrawn.

3. ***plurality of electrical contacts in electrical communication with conductors of the cable***

Applicant submits that in light of the addition of Figure 2B herein, illustrating electrical contacts 204B and 204C in electrical communication with conductors 205A and 205B of a cable, the objection as to this feature should be withdrawn.

4. ***annular groove proximate the joint***

Applicant disagrees with the Examiner and notes that Figure 3A, for example, clearly shows an annular groove 402A located proximate the joint 406. Applicant accordingly submits that the objection as to this feature should be withdrawn.

5. ***annular groove to be an ellipse or circle***

Applicant disagrees with the Examiner and notes that Figure 3A, for example, indicates that in one embodiment, the cross-section of the annular groove 402A comprises a portion of a circle, moreover, claim 7 has been amended to remove the reference to an elliptical cross-section. Applicant accordingly submits that the objection as to this feature should be withdrawn.

6. ***one additional annular groove***

In view of the cancellation of claim 8, the objection as to this feature should be withdrawn.

7. ***means to preclude arcing between the cable assembly and the receptacle***

Applicant respectfully notes that a “means to preclude arcing” is not recited in any of the claims and, for at least that reason, the objection as to this feature should be withdrawn. Applicant notes further that, instead, claim 13 recites “... a means for *facilitating diametric expansion*...” (emphasis added), claim 15 states that one exemplary function of the “means for *facilitating diametric expansion*” is to substantially preclude arcing and, finally, claim 18 indicates that one example implementation of the “means for *facilitating diametric expansion*” recited in claim 13 comprises .... a “joint formed at the connection of the terminal element and the metal fitting ...” In light of the foregoing, Applicant submits that the objection as to this feature should be withdrawn.

8. ***joint between the terminal element and the cable***

Applicant submits that in light of the amendments herein to claims 6 and 18, the objection as to this feature should be withdrawn. Regarding such amendments, the attention of the Examiner is respectfully directed to the discussion at II.2 above.



9. ***plurality of conductive elements within the terminal***

Applicant submits that in light of the addition of Figure 2B herein, illustrating a plurality of conductive elements 207A and 207B disposed within the terminal 204, the objection as to this feature should be withdrawn.

10. ***conductive elements in electrical communication with the conductors of the cable***

Applicant submits that in light of the addition of Figure 2B herein, illustrating conductive elements 207A and 207B in electrical communication with the conductors 205A and 205B of the cable, the objection as to this feature should be withdrawn.

11. ***plurality of contacts in electrical communication with the conductive elements***

Applicant submits that in light of the addition of Figure 2B herein, illustrating a plurality of contacts 204B and 204C in electrical communication with the conductive elements 207A and 207B, the objection as to this feature should be withdrawn.

For at least the reasons outlined at II.1. – II.11. above, Applicant respectfully submits that the objection as to the drawings should be withdrawn.

**III. Objection to the Specification**

The Examiner has objected to the specification as purportedly failing to describe various claimed features. Applicant submits that for at least the reasons outlined below, the objection should be withdrawn.

Following is a list of the features (in bold) which the Examiner has asserted are missing from the drawings, along with Applicant's comments concerning the particular listed item:

1. ***plurality of conductors of a cable***

Applicant disagrees with the Examiner and notes that Figure 2B, added by this amendment, plainly discloses a cable having a plurality of conductors 205A and 205B. Moreover, the specification clearly refers to "... electrical contacts 204B and 204C, in turn are each connected with a corresponding electrical conductor 205A and 205B ..." *Paragraph 0033. Emphasis added.* Finally, claims 1, 6 and 24, as initially filed, each referred to "a cable having a plurality of conductors ..." Contrary to the assertion of the Examiner, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

2. ***attachment between the fitting and the terminal***

Applicant disagrees with the Examiner and notes that Figure 2A, for example, clearly shows a terminal 302 attached to an interface portion 312 of fitting 308. Applicant accordingly submits that the objection as to this feature should be withdrawn. Moreover, the specification states "... an interface portion of the ... fitting 308 extends from the flange 304 and is attached to the terminal element 312 ..."



*Paragraph 0037. Emphasis added.* Contrary to the assertion of the Examiner, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

3. ***plurality of electrical contacts in electrical communication with conductors of the cable***

Applicant disagrees with the Examiner and notes that the specification plainly states "... electrical contacts 204B and 204C, in turn are each connected with a corresponding electrical conductor 205A and 205B ... In this way, electrical communication can be established between the ... x-ray device 100, and the electrical conductors of the cable assembly 200." *Paragraph 0033. Emphasis added.* Moreover, new Figure 2B clearly illustrates electrical contacts 204B and 204C in electrical communication with conductors 205A and 205B of a cable. Finally, claims 1, 6, 24 and 32, as initially filed, each referred to "... each of the plurality of electrical contacts being in electrical communication with a corresponding conductor ..." Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

4. ***annular groove proximate the joint***

Applicant disagrees with the Examiner and notes that Figure 3A, for example, clearly shows an annular groove 402A located proximate the joint 406. Moreover, the specification discusses such a groove at length in paragraphs 0042-0044. For example, the specification states "In this exemplary embodiment, the terminal element 402 defines a groove 402A that extends around a substantial portion of the circumference of the terminal element 402, so that the groove is substantially annular, and is located proximate the joint 406." *Paragraph 0042. Emphasis added.* Finally, claim 6, as initially filed, referred to "... a substantially annular groove proximate the joint ..." Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

5. ***annular groove to be an ellipse or circle***

Applicant disagrees with the Examiner and notes that Figure 3A, for example, indicates that in one embodiment, the cross-section of the annular groove 402A comprises a portion of a circle, moreover, claim 7 has been amended to remove the reference to an ellipse. Moreover, the specification clearly states "Implementations of the groove 402A having a partially elliptical or partially circular cross-sectional shape may be employed as well." *Paragraph 0043. Emphasis added.* Finally, claim 7, as initially filed, recited "... a cross-sectional shape of the substantially annular groove comprises a portion of one of: an ellipse; and, a circle ..." *Emphasis added.* Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.



6. ***one additional annular groove***

Applicant disagrees with the Examiner and notes that the specification clearly states "... some implementations of the invention include multiple grooves ..." *Paragraph 0043. Emphasis added.* Moreover, claim 8, as initially filed, recited "... wherein the terminal element defines at least one additional substantially annular groove." *Emphasis added.* Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature. Nonetheless, the cancellation of claim 8 herein renders this objection moot and the objection as to this feature should accordingly be withdrawn.

7. ***means to preclude arcing between the cable assembly and the receptacle***

Applicant respectfully notes that, contrary to the assertion of the Examiner, a "means to preclude arcing" is not recited in any of the claims. Applicant thus submits that the objection as to this feature should be withdrawn.

8. ***joint between the terminal element and the cable***

Applicant submits that in light of the amendments herein to claims 6 and 18, the objection as to this feature should be withdrawn.

9. ***plurality of conductive elements within the terminal***

Applicant disagrees with the Examiner and notes that the specification states, for example, that "... electrical contacts 204B and 204C ... are each connected with a corresponding electrical conductor ... of the cable 202 by way of conductive elements ... disposed within the terminal element 204A." *Paragraph 0033. Emphasis added.* Moreover, claims 24 and 32, as initially filed, recited "... a plurality of conductive elements substantially disposed within the terminal element..." *Emphasis added.* Finally, Figure 2B added by this paper illustrates a plurality of conductive elements 207A and 207B disposed within the terminal 204. Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

10. ***conductive elements in electrical communication with the conductors of the cable***

Applicant disagrees with the Examiner and notes that the specification states, for example, "... electrical contacts 204B and 204C ... are each connected with a corresponding electrical conductor ... of the cable 202 by way of conductive elements ... disposed within the terminal element 204A." *Paragraph 0033. Emphasis added.* Moreover, claims 24 and 32, as initially filed, recited "... each of the conductive elements being in electrical communication with a corresponding electrical conductor of the cable ..." *Emphasis added.* Finally, Figure 2B added by this paper illustrates the connections between conductive elements 207A/207B and respective electrical conductors 205A/205B. Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.



11. ***plurality of contacts in electrical communication with the conductive elements***

Applicant disagrees with the Examiner and notes that the specification states, for example, “electrical contacts 204B and 204C ... are each connected with a corresponding electrical conductor ... of the cable 202 by way of conductive elements ... disposed within the terminal element 204A.” *Paragraph 0033. Emphasis added.* Moreover, claim 24, as initially filed, recited “... each of the plurality of electrical contacts being in electrical communication with a corresponding conductive element of the terminal element ...” *Emphasis added.* Finally, Figure 2B added by this paper illustrates the connections between electrical contacts 204B/204C and respective conductive elements 207A/207B. Contrary to the assertion of the Examiner then, the specification clearly discloses the claimed feature and Applicant accordingly submits that the objection as to this feature should be withdrawn.

For at least the reasons outlined at III.1. - III.11. above, Applicant respectfully submits that the objection as to the specification should be withdrawn.

IV. **Rejection of Claims 1-13 and 18-27 under 35 U.S.C. § 112, First Paragraph**

The Examiner has rejected claims 1-13 and 18-27 under 35 U.S.C. § 112, first paragraph as purportedly failing to comply with the enablement requirement. Inasmuch as claim 8 is canceled herein, the rejection of that claim is moot and should be withdrawn. As to the remaining claims 1-7, 9-13 and 18-27, Applicant respectfully disagrees and submits that the rejection of those claims should be withdrawn.

With regard to the rejected claims, the Examiner has alleged that “The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art ... to make and/or use the claimed invention.” As to such “subject matter,” the Examiner recites the items addressed at II. and III. above and states in connection with those items that “The followings have been neither described in the specification nor shown in the drawings.”

Applicant disagrees with the Examiner however and submits that, for at least the reasons set forth at II. and III. above, the claimed features listed by the Examiner find clear support in the specification, drawings, and claims as initially filed. Applicant further submits that, as discussed above, the disclosure of the specification, drawings and claims as initially, filed taken together with the amendments to the specification and claims set forth herein, provide guidance that is more than adequate to enable one of skill in the art to make and use the claimed invention.

In light of the foregoing, Applicant respectfully submits that the rejection of claims 1-7, 9-13 and 18-27 should be withdrawn.

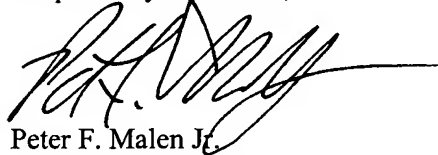


**CONCLUSION**

In view of the remarks submitted herein, Applicant respectfully submits that each of the pending claims 1-7, 9-13 and 18-27 now pending in this application is in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this 20<sup>th</sup> day of December, 2005.

Respectfully submitted,



Peter F. Malen Jr.  
Attorney for Applicants  
Registration No. 45,576  
**Customer No. 022913**  
Telephone No. (801) 533-9800





Title: HIGH VOLTAGE CABLE ASSEMBLY WITH ARC PROTECTION

Inventor: Hansen, et al.

Docket No.: 14374.111 Serial No.: 10/826,774

REPLACEMENT SHEET

3 / 4

*newly added*

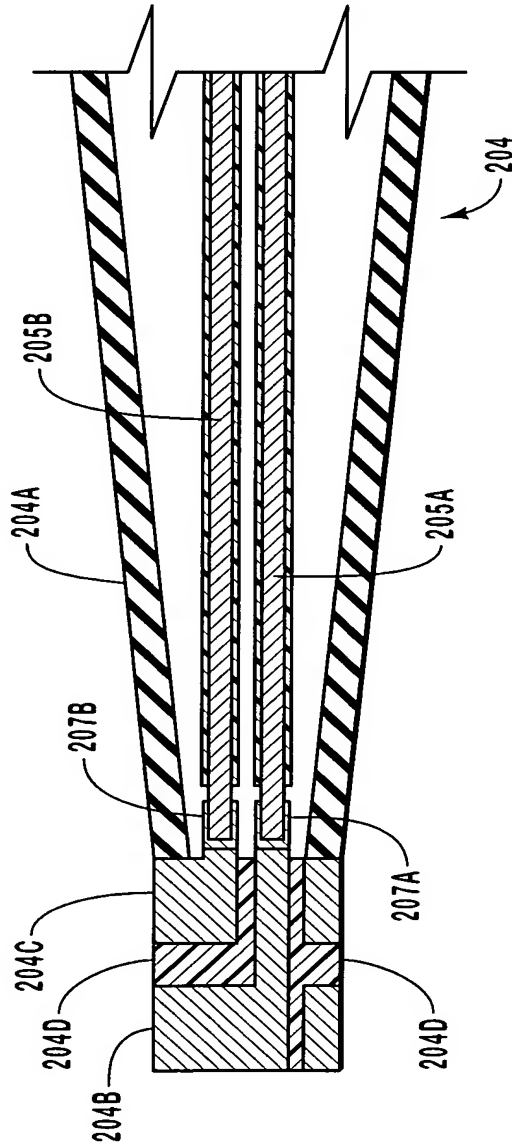


Fig. 2B



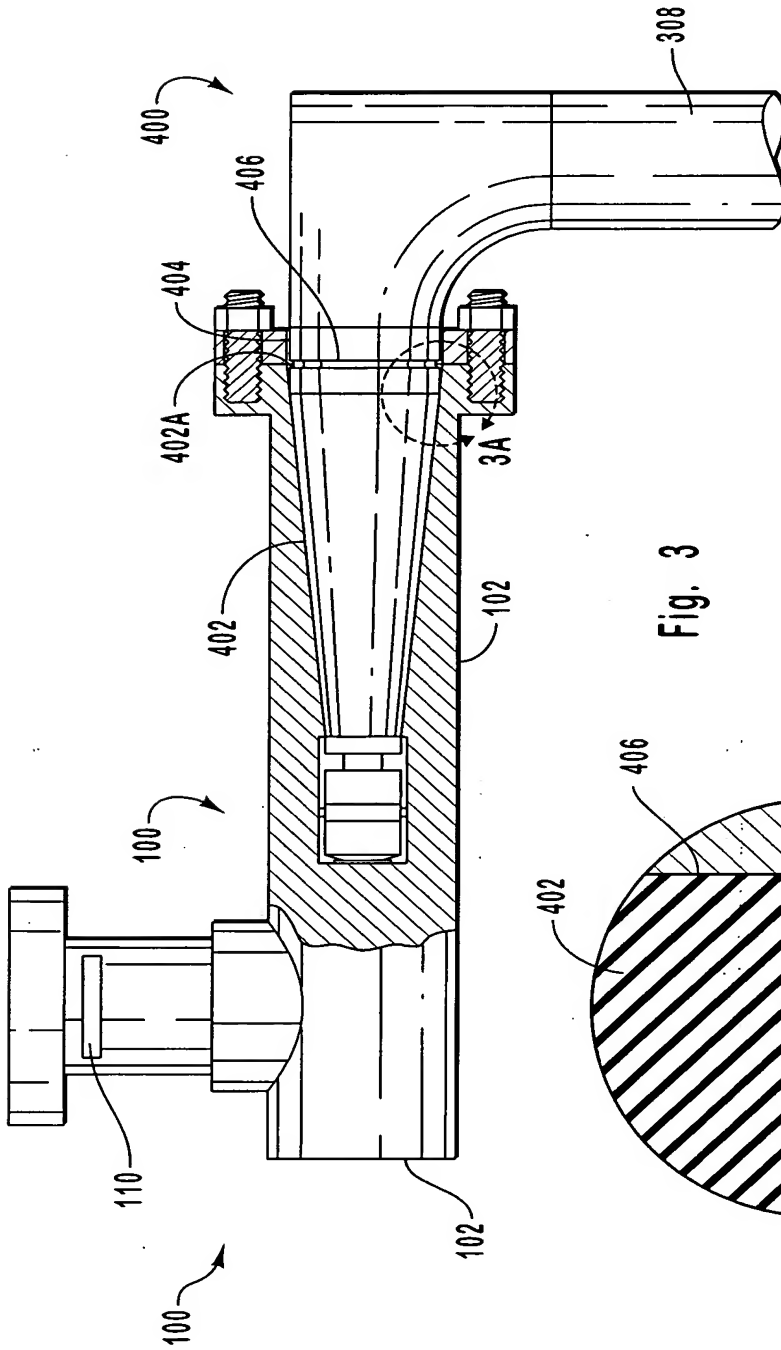


Fig. 3

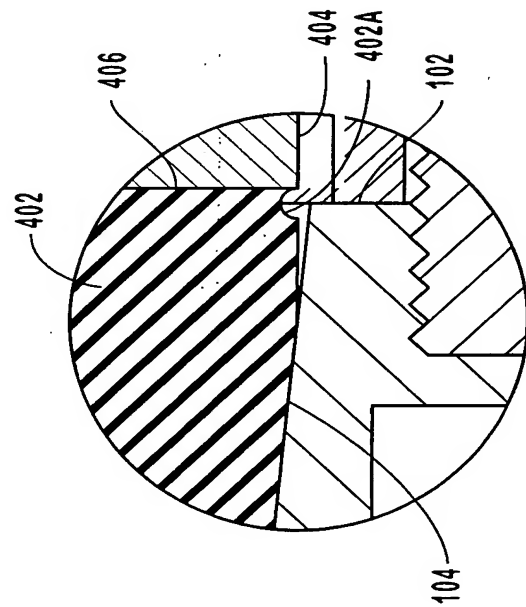


Fig. 3A